

**ABSTRACT OF THE DISCLOSURE****END NODE PARTITIONING USING VIRTUALIZATION**

5 A mechanism for allowing a single physical IB node  
to virtualize a plurality of host channel adapters is  
provided. This includes providing the appearance of both  
a router and multiple virtual HCA's residing behind that  
router, to the external REAL subnet components. Each  
virtual host channel adapter will have unique access  
10 control levels. One or more InfiniBand subnets are  
virtualized in such a way that nodes residing both within  
the virtual subnets and in separate physical subnets are  
completely unaware of the virtualization. This  
virtualization of InfiniBand subnets significantly  
15 increases the horizontal scaling capabilities of a single  
InfiniBand physical component, while at the same time  
provides "native" network throughput for all the virtual  
hosts.

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